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# Intended Adolescent Pregnancy: A Systematic Review of Qualitative Studies

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## **Abstract**

Previous research on teenage pregnancy suggests that there are distinct profiles of pregnancy intent among adolescents, reflecting differences in young people's understanding and endorsement of the concept of pregnancy intendedness. Little is known about adolescents' subjective perceptions of pregnancy intent. This systematic literature review comprehensively examines qualitative studies of intended teenage pregnancy. Several online databases were searched for publications on attitudes towards adolescents' pregnancy intentions. Following a systematic selection process, findings from included studies were analyzed and integrated using thematic synthesis. Six dominant themes emerged: pregnancy desire, negative and positive perceptions of pregnancy, ambivalence and fatalism, other people's views, and common characteristics of adolescent mothers. The themes are discussed in the context of current knowledge on adolescent reproductive health.

**Authors' Contributions**

JM conceived of the review, designed it, undertook the systematic search, analysis and thematic synthesis, and drafted the manuscript; AM participated in the design and interpretation of data, supervised the systematic search, analysis and thematic synthesis, contributed to the final manuscript. All authors read and approved the final manuscript.

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**Conflicts of interest**

The authors report no conflict of interests.

**Compliance with Ethical Standards**

As a systematic review of published research the article was assessed by the University of Edinburgh School of Health in Social Science Ethics Committee as not requiring formal approval.

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**Keywords**

Intended adolescent pregnancy; teenage pregnancy attitudes; systematic literature review.

## **Introduction**

Every year, approximately 16 million females aged 15-19 years and about one million females younger than 15 years old give birth worldwide (WHO, 2014). Although most of these births occur in low- and middle-income countries, adolescent pregnancy remains a critical public health concern in developed countries (UNICEF, 2013). From a public health perspective, adolescent pregnancy has a high-risk profile as the impact of multiple factors, including medical complications, lower educational level and long-term socio-economic consequences that confer increased risk of lifespan vulnerabilities to both mother and child. In addition, the perception of early childbearing as socially undesirable (McCarthy *et al.*, 2014) contributes to the perception of adolescent pregnancy as a negative phenomenon (Pinzon & Jones, 2012). However, there is a lack of understanding of how adolescents themselves understand adolescent pregnancy. Understanding the adolescent perspective on pregnancy could generate new insights into how policy makers as well as health and social care providers respond to the challenges of adolescent pregnancy.

There are different reasons for adolescents to become pregnant. Evidence suggests that the majority of teenage pregnancies are unplanned and undesired (e.g., Clear *et al.*, 2012). Consequently, most studies focus on developing strategies for preventing teenage pregnancy. However, not all adolescents view their pregnancies as unintended. Recent research has begun to distinguish between different teenage pregnancy intentions profiles – in particular dividing along dimensions of intent, e.g., intended or planned, unintended, and ambiguous (Jaccard *et al.*, 2003; Speizer *et al.*, 2004).

Planned (as distinct from unplanned) pregnancy in youth has been given relatively little attention in previous publications (Cater & Coleman, 2006). Indeed, estimates of the degree of pregnancy intendedness among adolescents differ across samples. In a sample of USA females aged 14 to 17 years (Bartz *et al.*, 2007), almost 6% of participants reported that they were currently trying to get pregnant, whereas in another sample of urban USA females approximately 12% of 15 to 19-year-olds declared plans to conceive at the time of the study (Kavanaugh & Schwarz, 2009). In the United Kingdom, *Teenage Pregnancy Strategy Evaluation* (British Market Research Bureau International, 2005) estimated that up to 10% of teenage pregnancies had been planned.

Although a substantial body of research examines adult perceptions of teenage pregnancy, relatively few studies have explored adolescents' perspectives (Herrman, 2008). A number of quantitative

studies examined pregnancy attitudes and intentions among young people, identifying common characteristics associated with positive attitudes toward early childbearing (e.g., Lau *et al.*, 2014). Most of the published evidence in this group of adolescents concerns attitudes toward termination (Cater & Coleman, 2006). Two narrative literature reviews have examined qualitative studies of teenage pregnancy in general, and identified evidence of positive perceptions of childbearing and a degree of planning among adolescent mothers. A meta-synthesis of studies investigating experiences of teenage mothers of children aged three months to three years by Clemmens (2003) identified five themes including an observation that young motherhood, despite bringing hardship, provides a stabilizing influence and can positively transform an adolescent's life. In a descriptive review of teenage pregnancy and motherhood, Spear and Lock (2003) reported that some adolescents recollect their pregnancies as being planned. As it has been suggested that pregnancy attitudes and intendedness may influence occurrence and outcomes of adolescent pregnancies (Phipps & Nunes, 2012), gaining insight into young people's attitudes toward it may improve understanding of the phenomena related to early childbearing. Consequently, the literature suggests that there is a lack of clarity over what is unique to adolescents perceptions and experiences of pregnancy, both in comparison to adult pregnancies, and in how we contextualize adolescent intended pregnancy in relation to adolescence development as a whole.

The above narrative reviews notwithstanding, there are no systematic literature reviews of how young people conceptualize intentional adolescent pregnancy. In particular, there is a paucity of qualitative examination of pregnancy perceptions (Rosengard *et al.*, 2006). This is unfortunate, as examinations of qualitative research methods are acceptable approaches for investigating adolescents lifestyles and behaviors (Rich & Ginsburg, 1999) and can be "especially appropriate for exploring issues about which little is known or written" (Burns, 1999, p.495).

Understanding young people's perceptions of the benefits and disadvantages of young parenthood is crucial for supporting adolescents in making better-informed decisions regarding their reproduction and leading them to safer and healthier futures (Rosengard *et al.*, 2006). Improved understanding of pregnancy intent may also aid in designing more effective, appropriate and acceptable strategies for public health interventions. Cater and Coleman (2006, p.6) argue that there is "a need for new materials/resources for professionals in order that they can work effectively with young people who have planned their pregnancy". In this respect, a qualitative approach highlighting the subjective impression of adolescents provides an important stakeholder perspective in identifying the individual needs of this group.

## **The current review**

The current review aimed to synthesize and critically evaluate published qualitative literature regarding intended adolescent pregnancy. The focus of the review is on non-medical aspects of teenage pregnancies and births, particularly adolescent females' views on the subject. Review of the qualitative literature was chosen as an appropriate way to represent the subjective views of young women. Unintended pregnancy, males' expectations, abortion, and concerns relating exclusively to sexual health such as contraception use and Sexually Transmitted Infections were considered to be outside the scope of the present review and were not examined. The primary research objective was to identify and evaluate the major themes emerging from the studies. A secondary aim was to identify methodological sources of bias in the qualitative literature.

## **Methods**

### **Design of Review**

Interpretive synthesis (IS) was utilized as the conceptual framework for the review. This approach, initially defined by Noblit and Hare (1988) and refined by Dixon-Woods and colleagues (2005), is grounded in the data reported from primary studies and assists the researcher to avoid specifying concepts and theories in advance of qualitative synthesis. An IS framework was chosen as the most adequate for reviewing the literature on a subject interweaving various scientific domains which has not been previously explored systematically (Dixon-Woods *et al.*, 2005).

The current systematic review was conducted in three stages:

1. Systematic search of qualitative studies reporting on intended teenage pregnancy
2. Data extraction and critical appraisal of the studies included in the review
3. Synthesis of the data

### **Systematic Search**

The following databases were searched between 24 April and 14 June 2015 to identify eligible articles: Ovid MEDLINE (1946 to June 2015), PsycINFO (1806 to June 2015), Embase (1974 to June 2015), The Joanna Briggs Institute Evidence Based Practice Database (1996 to June 2015), ASSIA (1987 – June 2015) and CINAHL Plus (1937 to June 2015). The final search terms consisted of three main categories: attitudes, age group, and the phenomenon under investigation. The first group incorporated words capturing psychological aspects of the research question: the attitudes, beliefs and perceptions of young people regarding teenage pregnancy (including intentions to become pregnant or remain non-

pregnant). The second category pertained to the age group of participants studied in the review. The last group indicated the phenomenon studied: terms such as planned, wanted, intended or intentional combined with pregnancy, motherhood or childbearing were searched for. Boolean search operators were utilized to connect key terms. Truncation was used where appropriate. The extended search strategy is detailed in Appendix A.

### **Inclusion and Exclusion Criteria**

Studies were included if they met following criteria:

1. Qualitative design
2. At least 50% of the studied sample included adolescents aged 10 to 19 years old
3. Study aims included examining thoughts, beliefs and attitudes regarding intended pregnancy in adolescents (actual or potential)
4. English language
5. Peer-reviewed article

Studies were excluded if they focused solely on:

1. Contraception use (other than discussing pregnancy intention as a reason for contraceptive failure)
2. Medical aspects of pregnancies or births
3. Pregnancy or Sexually Transmitted Infections (STI) prevention interventions
4. Male participants
5. Unintended adolescent pregnancy
6. Reproductive behaviors in adolescents with HIV or diabetes
7. Abortion and its consequences

### **Study Selection**

The results of the search strategy are illustrated in Figure 1. Records were identified through database searching. In addition, 30 additional records identified through screening of reference lists. Articles were screened via title screening, abstract screening and full-text articles assessment. Study selection was based on the above inclusion and exclusion criteria. Where there was a query on whether the article met the inclusion criteria, the full-text was retrieved and evaluated by a second reviewer. Final decisions on eligibility were made through consensus discussion. Eight articles were discussed this way, four of which were ultimately included and four excluded.



## **Data Extraction**

Data from the articles were extracted using a bespoke proforma, incorporating elements from previous similar systematic reviews (e.g., Valderas *et al.*, 2012). Bibliographic information, study characteristics, methods, main findings (including identified themes) and the interpretations of the authors (including recommendations) were collected. With regard to data from individual studies, where possible, relevant information was gathered using direct quotations from participants or authors interpretations in order to preserve the original meaning. In cases where only part of the findings of a study regarded pregnancy intentions among adolescents, the component which was assessed as irrelevant (i.e. directly corresponded to the exclusion criteria) was documented and reasons for excluding it from further synthesis were given. This ensured data collected was relevant to the subject of the review without unnecessarily excluding whole studies. For example, the study “Factors influencing teenage mothers participation in unprotected sex” by Burns (1999) generated six themes, yet only the ones related to pregnancy desire were extracted for the synthesis.

## **Critical Appraisal**

Qualitative research is a heterogeneous field encompassing a diversity of methods (Willig, 2013). Correspondingly, there are no unified protocols for quality assessment of qualitative studies (Dixon-Woods & Fitzpatrick, 2001). The Critical Appraisal Skills Programme (CASP, Hawker *et al.* 2002) tool was chosen to appraise the quality of the studies included in the synthesis and to ensure consistency. The tool consists of nine questions with which studies are scored as “good”, “fair”, “poor” or “very poor” on a range of criteria (Appendix B). Given the high degree of methodological variation across included studies, the rigor in documentation of study procedures was closely appraised as a key component of competent qualitative research (Willig, 2013). The researcher assessed all studies and 25% of them were checked by an independent rater to ensure the reliability of the quality measures, with a substantial level of agreement.

## **Data Synthesis**

Data-driven thematic analysis was chosen as the most effective method for synthesizing diverse types of evidence (Dixon-Woods *et al.* (2005). This was also the most appropriate approach to integrate descriptive data, given the relevant lack of data on subjective appraisals of teenage pregnancy intent in the existing literature. Lack of clarity regarding standardized procedures involved in the process of thematic analysis is often perceived as the central limitation of this form of analysis (Braun & Clarke, 2006). This obstacle was addressed by applying guidelines for thematic synthesis of qualitative research (Thomas & Harden 2008).

The extracted data were repeatedly re-read to identify patterns. Each sentence (including both direct quotations and researchers descriptions of collected data) was analyzed and relevant content coded. Codes were collated and grouped according to their meaning. When appropriate, new codes were created to name groups of initial codes. A network of interlinked items was analyzed and reorganized, and emerging overarching families of codes were labeled as individual themes. Extracted data was independently assessed by the second author, and the final set of themes was established through consensus agreement between authors. In the last stage of the synthesis the author supplemented an interpretation of patterns identified across studies, reflecting the differences in designs and contexts of each study.

## **Results**

### **Study Designs**

The systematic search identified 18 published articles, reporting findings from 14 cohorts. Key characteristics are detailed in Table 1. All studies were published between 1995 and 2013. The majority of the studies were based in the USA (10 out of 14 cohorts), two in Australia and two in the UK. All studies employed a qualitative design, although three reported mixed method designs combining qualitative and quantitative methods (Kendall *et al.*, 2005; Rosengard *et al.*, 2006; Schwartz *et al.*, 2010). All studies were cross-sectional with the exception of one cohort that was examined two times over an interval of four years (Smith Battle, 1995; Smith Battle, 1998). Data from two cohorts (five articles in total) describe findings from cross-sectional cohorts incorporating analyses of subsets of each cohort. Data collection methods comprised focus groups (four cohorts), observation combined with interviews (two cohorts), questionnaires combined with other methods (one cohort) and various forms of interviews (6 cohorts). One study used Q-methodology (Schwartz *et al.*, 2010).

Most authors used thematic analysis to interpret data (10 cohorts). Two studies employed a hermeneutic approach to data analysis and one used by-person factor analysis of Q-sort data. One author used a method proposed by Giorgi (1970) (Montgomery, 2001, 2002, 2004) and in one cohort the methods were described as both thematic analysis and hermeneutic analysis (Spear, 2001, 2004).

Four articles (Coleman & Carter, 2006; Montgomery, 2001, 2002, 2004) had a primary focus intended teenage pregnancy. The remaining studies included in the review were designed to answer questions not immediately related to the subject, but incorporated direct examination of pregnancy intendedness. Four studies examined adolescents attitudes and perceptions of teen pregnancy, three

studies sought to explore experiences of teenage motherhood, three investigated women's perceptions of pregnancy intendedness, and two explored qualitative reasons for failing to use contraception.

### **Characteristics of included studies**

The total number of participants in the reviewed cohorts was n=920. Number of participants in each individual study ranged from five to 247 (mean n=66). The majority of studies only recruited females, while three cohorts also included male adolescents (Herrman, 2008; Kegler *et al.* 2001; Redwood *et al.*, 2012). The age of participants ranged from 12 to 38 years, with the majority of cohorts (eight) involving adolescents within the 14 - 18 years category.

Participants reproductive status varied across studies. Two studies examined the attitudes of adolescents who were pregnant at the time of data collection, five cohorts consisted of teenagers who had given birth prior to the data collection, and two studies did not explicitly report the parenting status of participants. The remaining cohorts comprised mixed samples of parenting, pregnant or not pregnant participants (three cohorts).

### **Synthesis**

The findings from the synthesis were grouped in six main areas. The six themes and associated sub-themes are presented in Figure 2 and described in sections 3.3.1-3.3.6. Full delineations of themes, sub-themes and item level descriptors are contained in Appendix C. Table 2 illustrates the mapping of sub-themes to included articles.

#### ***Desire and Closeness***

This theme consisted of five sub-themes reflecting reasons for becoming pregnant or wanting to be a parent. A detailed diagram of the theme and some exemplary quotations are available in appendix Ci. *Self-oriented desire* includes visions of parenting as an attractive life pathway alternative to educational or professional career, which were not always perceived as real possibilities by the participants. Liking babies and desire to play with them were listed as key reasons for becoming pregnant. For example, a participant in Montgomery (2002, p.287) took pleasure in looking after children and "wanted a baby around". For some participants becoming pregnant served as means for filling the gap left by something they felt was lacking from their lives, or compensating for something that they

were resentful about. Examples of items in the former category are fighting loneliness and providing some form of occupation: "I'd be there for it and it will give me something to do" (Montgomery, 2002, p.287). The need for positive change in one's life was also grouped in this category: "[G]rowing up she was often separated from her siblings and that this separation also contributed to her wanting to become pregnant, again to keep someone close to her and for the stability that it provided" (Montgomery, 2001; p.24). Further examples of positive changes expected to be brought by pregnancy included gaining a new sense of identity as a parent, or provision of a motivating factor to stop engaging in risky behaviors.

The latter category consisted of compensation for negative experiences from the past such as unhappy childhood or the recent disappointment of a miscarriage. Self-oriented desire also included items related to timing of pregnancy such as pressure to complete reproduction early in life and fear of being infertile. Pregnancy was also viewed as an attempt to secure the relationship with boyfriend or bring it to the next level by starting a family (*Relationship with boyfriend/partner*). Seeking attention from parents, trying to mend their marital conflict, or wanting to follow one's mother's example in early pregnancy were grouped in *Relationship with family*. Motivations related to *Relationship with peers* included seeking their attention, wanting to "fit in", or proving one's womanhood or manhood. The last category in this theme was linked to the *Relationship with baby*. Desire to have somebody to love or to be unconditionally loved was mentioned in a number of studies: "I want to have someone that can love me when I want them to love me" (Herrman, 2008; p.47). Some participants reported (often retrospectively) a natural and inexplicable drive to be a mother and some regarded motherhood as a way of proving to others their capability of bringing up a child of their own.

### *Negative perceptions of pregnancy and "fears"*

This group of sub-themes identified perceptions of negative aspects of teenage pregnancy as well as content expressing young people's fears and anxieties (as shown in detail in Appendix Cii). Some participants were unable to describe any advantages of adolescent pregnancy and some openly regretted their decision to become mothers. Pregnancy was seen as restricting one's freedom, impeding achievement of one's life goals as well as imposing a negative change to an adolescent's relationships with a romantic partner and parents. Furthermore, participants mentioned lack of preparedness and general competence to have children in one's teenage years: "I really don't think anybody that's underage or anybody at school because they have like no experience for that kind of stuff" (Kegler *et al.*, 2001, p.248). Practical disadvantages of pregnancy such as impediments to education or employment as well as being stigmatized were also described.

### ***Benefits and positive aspects of pregnancy***

A detailed diagram of the theme and exemplary quotations are available in appendix Ciii. Some young people saw adolescent pregnancy in a more favorable light, including claiming it had no disadvantages at all. Some agreed that teenage pregnancy is manageable, even when not intended. Receiving public aid and support from family and peers were described as benefits. Pregnancy was reported to impose a positive change on an adolescent's life in a number of ways. Becoming pregnant was seen as making young people more mature (in terms of changing their priorities and attitudes toward life), triggering a modification of one's living arrangements, and improving relationships with romantic partners, family and peers:

"Young mothers alluded to holding on to true friends, making better choices in friends and activities, developing new friends as a result of the pregnancy or parenting, and receiving support and child care assistance from peers" (Herrman, 2008, p.45). Moreover, being closer in age to one's child was seen as a factor improving parent-child relationship.

### ***Ambivalence and Fatalism***

This theme covers items relating to indifference and ambivalence regarding sexual relations, pregnancy and parenting (as shown in Appendix Civ). Attitudes presented here are less clear-cut in terms of pregnancy intentions. This may be partially attributable to a spillover effect, as content was often identified in studies primarily focused on contraceptive failure. Sub-themes for *Ambivalence and Fatalism* include reasons for not using contraception effectively despite awareness of the potential of conceiving, a conviction that pregnancy does not significantly affect an adolescent's life "(It [having a child] won't affect me that much; I have my mom. I don't have to grow up faster, 'cause my mom's gonna help me and stuff" Spear, 2001, p.577); and identification of an external locus of control ("You can try to get in the way of fate, but it won't do you any good ... we're just not in control in this life." Burns, 1999, p.497 and "It just happens - it's one of those things that happen. It's gonna happen." (Kendall *et al.*, 2005, p.303). These last two quotes relate to the view that the individual has no actual control over their fertility.

### ***Others perceptions***

This theme reflects an aggregation of commonly held views about adolescent pregnancy (as shown in Appendix Cv). It is divided into three main sub-themes: views about adolescent mothers, adolescent pregnancy, and pregnancy timing. The first sub-theme reflects both positive and negative perceptions of teenage mothers, such as deserving respect for managing their lives as young parents, and being

treated differently by professionals because of their young age (regardless of the intendedness of pregnancy). Comments about adolescents being unaware of burdensome responsibilities associated with pregnancy and the fact that teenagers who are aware of them avoid pregnancy were also categorized in this group.

Views about adolescent pregnancy included opinions about its prevalence ("My whole school is pregnant" and "Every girl I grew up with is pregnant" Crump *et al.*, 1999, p.37). There were also observations that acceptance of, and attitudes toward, adolescent pregnancies vary across social groups and backgrounds, a notion that some adolescents do plan their pregnancies. Finally, some participants also expressed the belief that teenage pregnancy has little impact on an adolescent's life.

Opinions regarding pregnancy timing were also varied, with little consistency emerging from the literature. Some participants stated that one should wait until after the teenage years. Others stated that capability to raise a child is not age related, but depends on other factors: "You should be financially stable, emotionally stable, able to take care of the kids, finish high school. It isn't really about age." (Kendall *et al.*, 2005, p.304) Other factors identified included independence from one's family of origin, vocational stability, or the stability of the relationship with the partner.

#### *Common characteristics of adolescents who become pregnant*

This theme reflects participant's beliefs that adolescents who become pregnant share specific common characteristics. A detailed diagram of this theme is available in appendix Cvi. The items grouped in this theme reflect an aggregation of observations provided by adolescent mothers, non-parenting and non-pregnant peers and researchers' findings are also included. However, a noticeably consistent set of themes emerged across these diverse samples. We also highlight that this theme is closely linked to Theme 3.3.5 "*Others' perceptions*."

The first sub-theme consists of characteristics related to family background, such as growing up in an unsettled environment (parental conflict, violence, frequent house moves, etc.) or involvement in the social care system, and being raised in a community where early motherhood was a social norm. There is an underlying implication that adolescent intended pregnancy either occurs within, or as a response to a context of disruption.

The second sub-theme includes observations regarding adolescent mothers' personal experiences preceding the conception. Examples of items in this group are: experiencing previous pregnancy (resolved by abortion, miscarriage or birth; keeping the infant or surrendering it for adoption), having a history of fighting behaviors, and having negative experiences and attitudes toward formal education.

The next sub-theme groups reflections relating to post-birth circumstances of adolescent mothers. Such observations include: strong motivation to do well in life and to be a good parent, and not remaining in a relationship with the father of the first child. Furthermore, adolescents who intentionally became pregnant may see less negative aspects of early motherhood than females who had unplanned pregnancies.

This theme also includes researchers' reflections about common beliefs of adolescent mothers, with evidence of compartmentalization of different sets of concepts. For instance, separation of pregnancy, motherhood, and marriage was mentioned by Spear (2001), and separation of pregnancy, motherhood, and continuing the relationship with the father of the child was noted by Kendall *et al.* (2005). Conviction that one's education or employment options were limited and confidence in one's competence to be a mother were also described (e.g., Coleman & Carter, 2006).

A last sub-theme relates directly to intended pregnancy and the degree to which the romantic partner is involved in pregnancy planning. Three profiles of romantic partners' participation were identified: involved, ambivalent, or not involved. In the first circumstance, partners had a conversation about intentions and agreed to try to become parents in the near future; in the second option, the father's opinion was not clear; and in the last circumstance there was no clear communication between partners regarding pregnancy intentions:

"I wanted to have a baby; I told him (the boy who likely fathered her baby) I wanted to. It seems like he was havin' sex just to have sex. He didn't care about what I had to go through now. I think I might quit havin' sex, it can hurt. I want to know who the baby's father is" (Spear, 2004, p.341) Discussion between the adolescent mothers and their romantic partners regarding becoming pregnant was sometimes mentioned, but the father's level of involvement in the actual decision to conceive was not always clear.

### **Quality Criteria Findings**

Quality review indicated that the included studies had considerable variation in methodological quality (see Table 3). However, given the limited nature of research conducted to explore young people's views and the variety of methods used to collect data, this level of variance between studies is not unexpected. (Rich & Ginsburg, 1999).

The most consistent limitation noted in the included studies was poor quality reporting regarding procedures used. Vague or limited description of methods and inadequate description of data

collection were commonly noted across studies. Divergence in descriptions of the research process was also observable between the articles reporting findings from the same cohort (e.g., Montgomery 2001, 2002). In addition, sampling reporting was inconsistent. There were also concerns regarding generalizability, in terms of the extent to which theory derived from qualitative research is applicable to other individuals in similar situations (Horsburgh, 2003).

## **Discussion**

The primary aim of the current review was to identify and evaluate the major themes emerging from qualitative studies exploring intended adolescent pregnancy. Six overarching themes emerged from the synthesis of the included studies: Desire and Closeness; Negative perceptions of pregnancy and “fears”; Benefits and positive aspects of pregnancy; Ambivalence and Fatalism; Others perceptions; Common characteristics of adolescents who become pregnant. The majority of the data collected in these studies express a sampling of young people’s views. In this respect, the review provides a synthesis of themes that represent the perspectives of adolescents’ themselves on the topic of intended adolescent pregnancy. The participants were adolescents of different reproductive status (pregnant, not pregnant, or parenting), and therefore the synthesis results combined accounts of young people’s views from several vantage points.

In terms of the predominant themes emerging from the synthesis, *Desire and Closeness* was prominent, reflecting the high frequency and salience within the articles of a rationalization of the desire to become pregnant or to “have a baby”. Items in this theme emphasized relational aspects of motherhood, in contrast with more practical aspects. The latter consideration was reflected in the theme *Benefits and positive aspects of pregnancy*.

Although it is estimated that the majority of teenage pregnancies are unintended and “the first conscious decision that many teenagers make about their pregnancy is whether to have an abortion or to continue with the pregnancy” (Social Exclusion Unit, 1999, p.28), the findings of the review show that for some adolescents a certain degree of decision-making occurs prior to conception. Despite the common belief that adolescent pregnancies are outcomes of inadequate sexual education and ignorance about contraception (Drife, 2004), many participants described a coherent awareness of the connection between sexual intercourse and pregnancy, and clear intentions to conceive.

One possibility is that the *desire* theme reflects an attachment or relational perception of the baby as a contributor to the mother’s emotional wellbeing (Goldberg, 2000). For instance, longing for love from



parents, partner, or the future child, was a notable construct. Similarly, the need for stability in life and compensation for emotional neglect experienced from carers were frequently mentioned motives. It is noteworthy, however, that for some participants a desire to have a baby was not directly linked to being a parent as presented by one of Montgomery's (2002) interviewees who wanted a baby around, but said that a younger sibling would have been equally satisfying.

The perceived drawbacks of pregnancy were grouped in the theme *Negative perceptions of pregnancy and "fears"*. Particularly relevant to the subject of the reviews the notion that some adolescents who became pregnant intentionally were disappointed with how reality did not meet their expectations. This post-birth construct juxtaposed with the striking optimism presented by some pregnant interviewees (e.g., Spear, 2001) draws attention to the role of the possibility of having an idealized image of what life would be like after conception. It has been suggested that cognitive maturity plays a role in sexual and reproductive decision-making (Shearer *et al.*, 2002) and, depending on an individual's cognitive stage, the ability to accurately envisage the consequences of pregnancy may be limited (Gordon, 1990). Sheeder and colleagues noted that adolescents are prone to define benefits and costs of parenting by the circumstances of their relationship with their partner rather than in consideration of life plans (2009).

Perceived benefits of early childbearing were grouped in *Benefits and positive aspects of pregnancy*. Although a great part of the literature emphasizes the disadvantages of teenage parenthood (Coleman, 2011), observations such as that pregnancy causes a favorable change in an adolescent's life and is not an obstacle for vocational accomplishments are supported by some more recent studies (e.g., Ermish & Pevalin, 2003). Zeck and colleagues examined long term outcomes of Austrian females who gave birth at the age of 17 or younger and found that within five years from delivery a significant part of mothers obtained higher level education and were more satisfied in certain aspects of life compared with a reference group (2007). Such reports of young mothers' subjective assessment indicate that the common belief that adolescent pregnancy generates hardship may not be true for all teenage mothers, although this may itself be subject to contextual considerations, such as cultural background.

In contrast to the unequivocal perceptions depicted above, the synthesis revealed a group of concepts expanding beyond a simplistic desire to become pregnant. Some statements indicated young people's ambivalence toward pregnancy and a fatalistic vision of conception as an event being beyond their control. Such voices were grouped in the theme *Ambivalence and Fatalism*. In some cases the reason for

failure to use contraception was an intention to conceive. However, for a percentage of participants there was no conscious intent to do so, and yet they deliberately neglected to use contraception. Equivocal viewpoints have also been observed in quantitative investigations of adolescents' attitudes toward childbearing. Stevens-Simon *et al.* (1996) found that in a group of 200 pregnant teenagers 20% said they did not use contraception because they "did not mind getting pregnant" (p.48). Additionally, Jaccard *et al.* (2003) in their longitudinal study showed that between 15 and 30% of participating teenagers presented "some degree of ambivalence toward becoming pregnant relative to their peers" (p.79). Therefore, our themes and existing research suggest that there is a lack of coherence and contradiction within adolescent's attitudes to intended pregnancy that fits with the position of adolescence as a developmental period where individuals demonstrate fluidity in their identity and beliefs.

Our synthesis also clarifies how much existing health education and/or folk beliefs regarding adolescent childbearing inform young people's subjective understanding of intended pregnancy. General statements about teenage motherhood were distinguished from more specific observations regarding common characteristics of adolescent pregnant females. Views that went beyond participants' personal experiences were grouped in the theme *Others perceptions*. For example, opinions such as that teenage pregnancy is a common and acceptable event, and that pregnancy does not significantly alter one's life were placed in this theme. Such beliefs suggest that in some social contexts early childbearing may be a norm. We also note that the observation that "[t]he social networks of young people in their families and communities are significant sources of cultural beliefs and of social support" has significant implications (Jones, 2005, p.3). In communities where early parenting is acceptable and encouraged, ordinary attempts to reduce unintended pregnancy rates may prove unsuccessful.

Findings from qualitative research cannot be statistically representative of other populations (Horsburgh, 2003), however, some of the *Common characteristics of adolescents who become pregnant* identified in the synthesis are consistent with findings from quantitative studies. For example, risk factors for teenage pregnancy identified by Dennison (2004) include experiencing deprivation, being a child of an adolescent mother, and low educational achievement. However, a USA longitudinal study that used pregnancy intentions as a variable showed that in terms of social milieu features (such as parental relationship status, household-social problems, and having a friend who experienced pregnancy) teenage pregnant females who wanted a baby did not differ from participants for whom

pregnancy “just happened” (Rubin & East, 1999). Further research should address these contradictory findings.

### **Limitations**

We acknowledge several limitations of the current review, both in terms of the implementation of the review and the limitations of the primary research. Firstly, with regard to the review methodology, there are several approaches to integrating qualitative research (e.g., meta-ethnography, grounded theory, case survey, narrative summary), and this review was naturally constrained by the limitations of the chosen method (Saini & Shlonsky, 2012). The process of qualitative synthesis is inherently interpretive, therefore open to subjectivity and potential bias (Dixon-Woods *et al.*, 2005). In this respect, we acknowledge the first author’s midwifery background and the second author’s training as Clinical Psychologist could have influenced their interpretation.

Secondly, we note limitations inherent to the reporting of the primary research included in the review. The quality of the review may have been constricted by the variability of the included studies. Methodological shortcomings of the included studies including lack of clarity regarding what constitutes a theme, and differences in reporting made it difficult to extract and synthesize data. These difficulties are common weaknesses in synthesizing findings from qualitative studies. (Sandelowski & Barroso, 2002). Nevertheless, given the scarcity of eligible data in this emerging field, it may be justified to have broad inclusion criteria to accurately summarize the literature. It has, however, been noted that general standards regarding systematic synthesis of qualitative data are needed (Carroll *et al.*, 2012).

A further limitation was multiple reporting from similar cohorts (e.g., Montgomery 2001, 2002), including discrepancies in documented procedures within different publications from the same cohort. Furthermore, data could be extracted in different quantities from various articles due to the diversity of included studies. For example, a great proportion of original data was extracted from studies focusing primarily on planned teenage pregnancy (e.g., Montgomery, 2002), while studies such as Schwartz *et al.* (2010), which used a nearly quantitative design, provided little qualitative data that could be synthesized.

### **Implications for Research and Practice**

Studies used various forms of pregnancy intentions measurements and many used retrospective assessment of such intentions. Retrospective evaluation of attitudes toward conception may be a source of recall bias due to *ex post* rationalization (Joyce *et al.*, 2002). Therefore, a more unified,

efficient, and reliable tool to assess pregnancy attitudes among young people is needed (Smith *et al.*, 2013). Both qualitative and quantitative longitudinal studies exploring pregnancy intentions may help achieve that goal.

Another explanation for the disparate findings of the review may be the lack of clarity regarding definitions in this area (Rocca *et al.*, 2010). Further research is warranted to illuminate how young people, practitioners, and researchers understand these constructs. Likewise, more practical aspects of attitudes toward pregnancy should be further explored. A previous quantitative study found that, regardless of age, and in comparison with those who conceive unintentionally, adolescents who intend to become pregnant do so from a position of personal and social strength; yet this strong background was not reflected in more healthy behaviors (Sheeder *et al.*, 2009). Identifying whether negative outcomes associated with teenage pregnancy (e.g., Fraser *et al.*, 1995) apply equally to pregnancies that are anticipated as to unwanted conceptions could be the goal of future research. Similarly, clarification of characteristics placing adolescents at higher risk for pregnancy due to positive attitude toward early childbearing will aid development of mental and physical health policies tailored to the needs of this specific group.

### **Conclusion**

The research on intended teenage pregnancy reviewed in the article was heterogeneous and presented several methodological shortcomings. That said, the findings draw attention to the complexity of adolescent pregnancy intentions and indicate the potential differences in attitudes that occur across various social contexts (Carter & Spear, 2010). This variance has important implications for needs-matched health care as different groups may require different approaches. Moreover, inaccurate perceptions of the benefits associated with pregnancy suggest there may be a need for more comprehensive reproductive health education. The identified shortcomings in the research in this field could be addressed by selecting adequate designs and emphasizing the need for transparency in reporting. Future research should focus on providing a greater understanding of pregnancy intentions among adolescents and developing more efficient measures of these attitudes.

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## Appendices

### Appendix A. Extended search strategy table

As used in Ovid Searcher for MEDLINE, PsycINFO, and Embase.

Number	Searches	Results
1	(attitudes or perceptions or beliefs).mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, tc, id, tm, tn, dm, mf, dv, kw]	835421
2	((plann* or wanted* or inten*) adj3 (pregnan* or mother* or childbear*)).mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, tc, id, tm, tn, dm, mf, dv, kw]	10777
3	(adolescen* or teen*).mp. [mp=ti, ab, ot, nm, hw, kf, px, rx, ui, tc, id, tm, tn, dm, mf, dv, kw]	3322233
4	2 and 3	2164
5	1 and 4	504
6	limit 5 to english language	473
7	remove duplicates from 6	342

## Appendix B. Quality assessment protocol

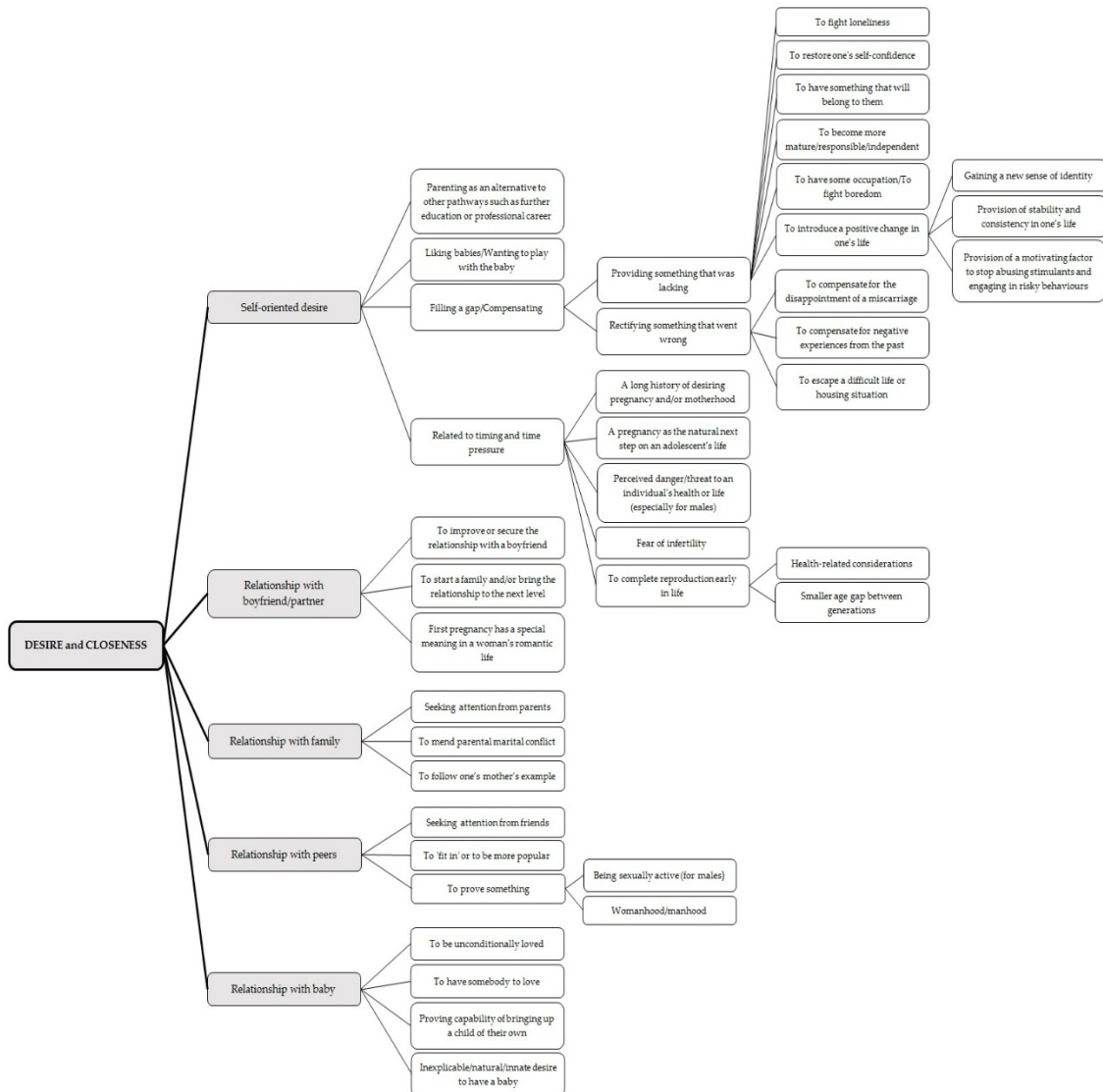
Critical Appraisal Skills Programme (CASP) tool as adapted by Hawker *et al.* (2002).

1.	<b>ABSTRACT AND TITLE</b>	<b>Did they provide a clear description of the study?</b>
	Good	Structured abstract with full information and clear title.
	Fair	Abstract with most of the information.
	Poor	Inadequate abstract.
	Very Poor	No abstract.
2.	<b>INTRODUCTION AND AIMS</b>	<b>Was there a good background and clear statement of the aims of the research?</b>
	Good	Full but concise background to discussion/study containing up-to-date literature review and highlighting gaps in knowledge. Clear statement of aim AND objectives including research questions.
	Fair	Some background and literature review. Research questions outlined.
	Poor	Some background but no aim/objectives/questions, OR Aims/objectives but inadequate background.
	Very Poor	No mention of aims/objectives. No background or literature review.
3.	<b>METHOD AND DATA</b>	<b>Is the method appropriate and clearly explained?</b>
	Good	Method is appropriate and described clearly (e.g., questionnaires included). Clear details of the data collection and recording.
	Fair	Method appropriate, description could be better. Data described.
	Poor	Questionable whether method is appropriate. Method described inadequately. Little description of data.
	Very Poor	No mention of method, AND/OR Method inappropriate, AND/OR No details of data.
4.	<b>SAMPLING</b>	<b>Was the sampling strategy appropriate to address the aims?</b>
	Good	Details (age/gender/race/context) of who was studied and how they were recruited. Why this group was targeted. The sample size was justified for the study. Response rates shown and explained.
	Fair	Sample size justified. Most information given, but some missing.
	Poor	Sampling mentioned but few descriptive details.
	Very Poor	No details of sample.
5.	<b>DATA ANALYSIS</b>	<b>Was the description of the data analysis sufficiently rigorous?</b>
	Good	Clear description of how analysis was done. Qualitative studies: Description of how themes derived/respondent validation or triangulation. Quantitative studies: Reasons for tests selected hypothesis driven/ numbers add up/statistical significance discussed.
	Fair	Qualitative: Descriptive discussion of analysis. Quantitative.
	Poor	Minimal details about analysis.
	Very Poor	No discussion of analysis.
6.	<b>ETHICS AND BIAS</b>	<b>Have ethical issues been addressed, and what has necessary ethical approval gained? Has the relationship between researchers and participants been adequately considered?</b>

	Good	Ethics: Where necessary issues of confidentiality, sensitivity, and consent were addressed. Bias: Researcher was reflexive and/or aware of own bias.
	Fair	Lip service was paid to above (i.e., these issues were acknowledged).
	Poor	Brief mention of issues.
	Very Poor	No mention of issues.
7.	<b>RESULTS</b>	<b>Is there a clear statement of the findings?</b>
	Good	Findings explicit, easy to understand, and in logical progression. Tables, if present, are explained in text. Results relate directly to aims. Sufficient data are presented to support findings.
	Fair	Findings mentioned but more explanation could be given. Data presented relate directly to results.
	Poor	Findings presented haphazardly, not explained, and do not progress logically from results.
	Very Poor	Findings not mentioned or do not relate to aims.
8.	<b>TRANSFERABILITY OR GENERALIZABILITY</b>	<b>Are the findings of this study transferable (generalizable) to a wider population?</b>
	Good	Context and setting of the study is described sufficiently to allow comparison with other contexts and settings, plus high score in Question 4 (sampling).
	Fair	Some context and setting described, but more needed to replicate or compare the study with others, PLUS fair score or higher in Question 4.
	Poor	Minimal description of context/setting.
	Very Poor	No description of context/setting.
9.	<b>IMPLICATIONS AND USEFULNESS</b>	<b>How important are these findings to policy and practice?</b>
	Good	Contributes something new and/or different in terms of understanding/insight or perspective. Suggests ideas for further research. Suggests implications for policy and/or practice.
	Fair	Two of the above (state what is missing in comments).
	Poor	Only one of the above.
	Very Poor	None of the above.

## Appendix C. Description of themes, sub-themes and item level descriptors

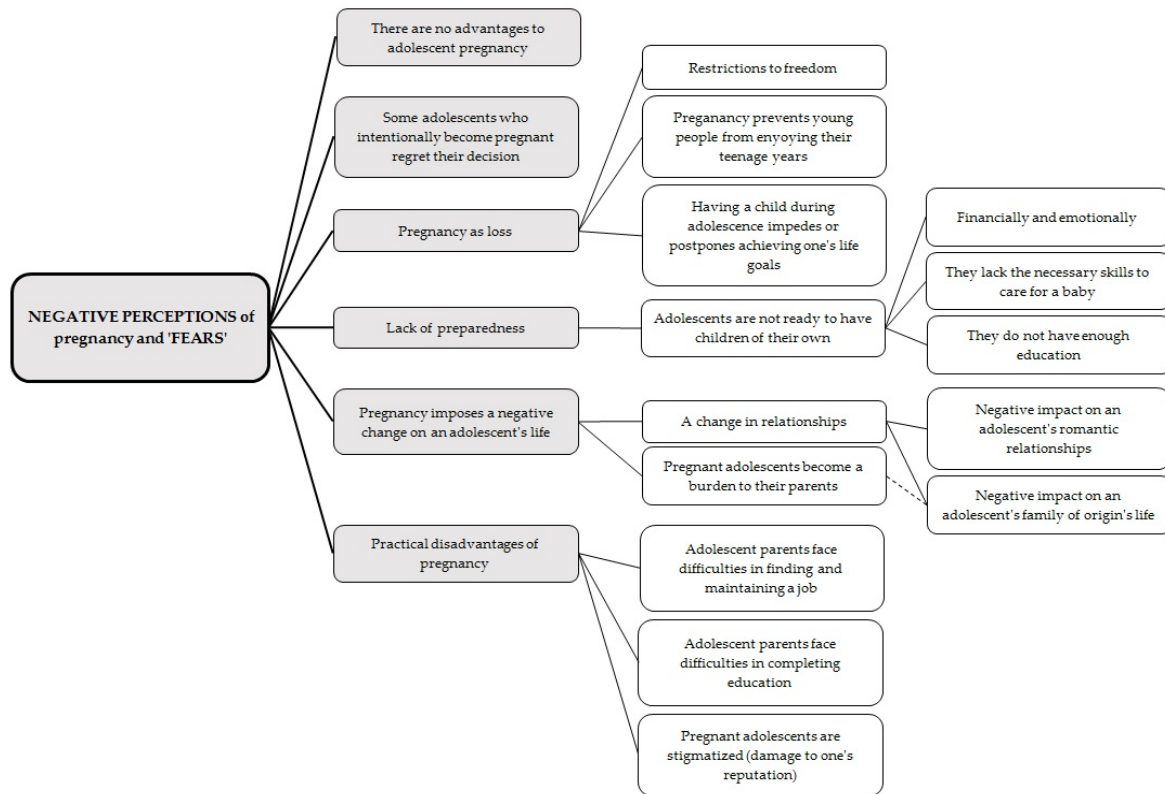
### i. *Desire and Closeness* diagram and exemplary quotations



Theme: <i>Desire and Closeness</i>	
Sub-theme	Exemplary quotations
Self-oriented desire	<p><i>"The [boys] that are out here, like on the verge of getting killed or getting locked up, they just basically want a little one of them running around. That is why [they] are trying to get girls pregnant now."</i> (Crump et al., 1999, p.39)</p> <p><i>"I wanted to grow up .... I thought that I would always be a little kid and I thought it was time for me to move along and I wanted to grow up ... so I thought this (the pregnancy) was it."</i> (Montgomery, 2002, p.286)</p> <p><i>"I really thought having a baby might make up for all the bad stuff that had happened in my life, and all the people I wanted to love me who didn't. I guess I thought my baby would give me what I'd never had-unconditional love. And yeah . . . I wanted that. A lot. If there was a chance of that, I wanted to let it happen any way it could"</i> (Burns, 1999, p.496-497)</p> <p><i>"I wanted to give him [baby son] - give him stability - in a stable home and like, just - just live a life that was - the stability - everything that I didn't have - it was just - I really, really wanted to give everything for him - just a stable home, a really nice life - and he - and he's got that."</i> (Aged 13)</p>

	<p>(Coleman &amp; Carter, 2006, p.604)</p> <p><i>"Housing-wise - in a way we're better off because we're living by ourselves, but also, when we did live - 'cos we basically lived with my mum for a while - you know . . . she was in all day, every day - so, in - but it wasn't ours, whereas this is ours. We're responsible for paying the - the rent every week [laughs] - we're responsible for putting food in the cupboard, you know - and that's what I dreamed of really. Having a baby and getting out of that situation with my mum's drinking" (Aged 16)' (Coleman &amp; Carter, 2006, p.603)</i></p> <p><i>"My parents didn't show me what was right. I will show mine." (Herrman, 2008, p.47)</i>  <i>"It's better to have parenting earlier and be done." (Herrman, 2008, p.47)</i>  <i>"[Y]ou get parenting done and over with when you are young and healthy . . . early in your life when you don't have risk factors." (Herrman, 2008, p.47)</i></p> <p><i>'[T]he identity of mothering was familiar to Tamika and presented one of the few live options available for girls when graduation from high school, marriage, and employment prospects are limited.' (Smith Battle, 1995)</i></p>
<b>Relationship with boyfriend/partner</b>	<p><i>'Some girls may get lucky and find a boy that don't have kids. [They think] "If I have a baby by him, that's going to be his first child, so he's going to love me."' (Crump et al., 1999, p.37)</i></p> <p><i>"Well, if they like the dude a lot and they don't want him to leave and they want to stay with him, they think having a baby is going to hold them down." (Kegler et al., 2001, p.249)</i></p> <p><i>"An advantage is that I feel a baby will make me and my boyfriends relationship closer." (Rosengard et al., 2006, p.506)</i></p>
<b>Relationship with family</b>	<p><i>'(15-year-old prenatal client pregnant with second child, first pregnancy at 13-years-old)</i>  <i>"They really give me a lot with these babies I got a lot of new attention when before they really didn't. They are making sure I'm ok, buying lots of things, I didn't buy anything the whole time." (Kendall et al., 2005, p.304)</i></p> <p><i>'Conceiving her first pregnancy at 17 while her parents were separated and contemplating a divorce, she imagined that an infant might solve her problems, rectify her sense of isolation and failure, and perhaps reunite her parents.' (Smith Battle, 1995)</i></p>
<b>Relationship with peers</b>	<p><i>"Well, there's girls at our school that think it's pretty neat to have a baby that young." (Kegler et al., 2001, p.249)</i>  <i>"And then there's some people that they like want to have a baby to prove they're a woman or something." (Kegler et al., 2001, p.249)</i>  <i>"So he can prove he's had sex." (Kegler et al., 2001, p.249)</i>  <i>"Want to show he is a man." (Kegler et al., 2001, p.249)</i></p>
<b>Relationship with baby</b>	<p><i>"Some females have babies but don't know they have babies for this reason, but they need to feel loved. They need to be accepted. Ant they know that child will have to love them... A child depends on its mother to feed it, to clothe it, to keep it warm, to love it" (Crump et al., 1999; p.37)</i></p> <p><i>"My sister's friend, she wanted to have a baby because she thought nobody love her and she wanted to have something, that somebody loved her and that she could claim as hers" (Kegler et al., 2001; p.249)</i></p> <p><i>'[S]he desired to start her own family and be a mother indicated that she felt this desire was "natural" or had an innate component. Two girls had difficulty describing exactly why they wanted to be a mother, stating that they really "don't know" or were "not sure."' (Montgomery, 2002; p.287)</i></p>

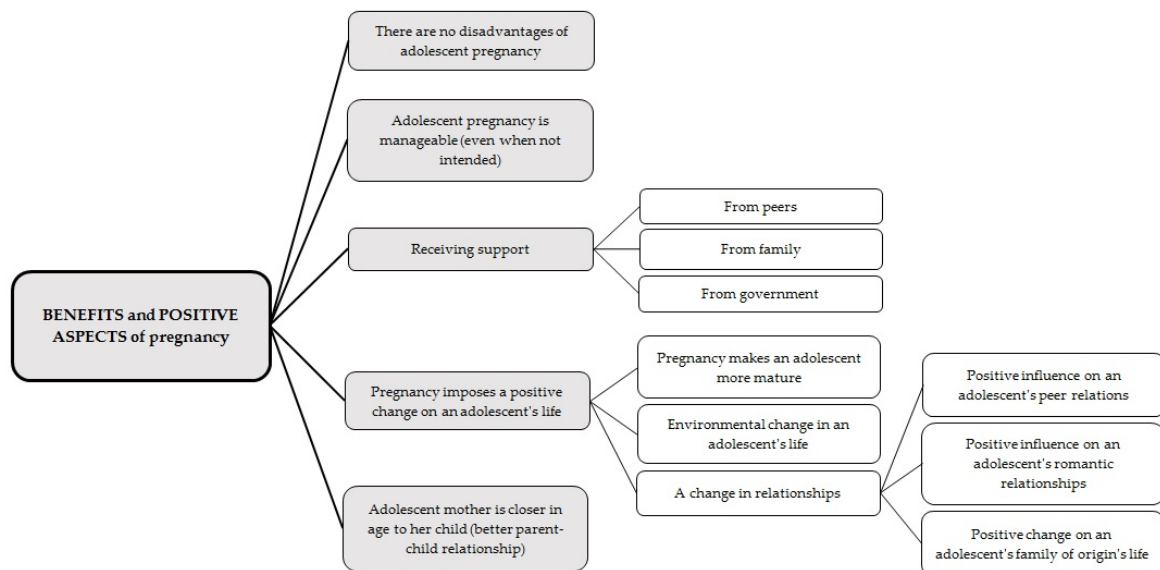
ii. Negative perceptions of pregnancy and 'fears' diagram and exemplary quotations



Theme: <i>Negative perceptions of pregnancy and 'fears'</i>	
Sub-theme	Exemplary quotations
<b>There are no advantages of adolescent pregnancy</b>	<p><i>"There's nothing worse than having a baby as a teenager. A child is a blessing, but I don't want to be blessed like that."</i> (Herrman, 2008, p.47)</p> <p><i>"I don't know of any good things or advantages of having a baby this young."</i> (Rosengard et al., 2006, p.505)</p>
<b>Some adolescents who intentionally become pregnant regret their decision</b>	<p><i>"I think I rushed in to it – yeah - and I thought I was in love, and I thought that person would be there for me, but they weren't. And I have to deal with that, 'cos he's [baby's father] not coming back... I do love her [baby daughter], but I just wish - I dunno - I should've done things differently and not got, like, obsessed by wanting one - y'know, cos I thought it would make me happy - and it has - but not what I thought."</i> (Aged 16)' (Coleman &amp; Carter, 2006, p.605)</p> <p><i>"[A]fter I got married I really, I really changed my mind about havin' the baby 'cause I was suffering emotionally 'cause I didn't want my child to go through that, you know ... That was the time when I regretted getting pregnant."</i> (Montgomery, 2004, p.31)</p> <p><i>"They expect everything to be perfect and have a perfect family and everything be all nice, but when [laughs] reality hits home, you've got a screaming child 24/7 and you can't cope [laughs]."</i> (Redwood et al., 2012, p.22)</p>
<b>Pregnancy as loss</b>	<p><i>'Child care was viewed as labor-intensive, impacting significantly on an adolescent's freedom and ability to enjoy the teenage years'</i> (Crump et al., 1999, p.37)</p> <p><i>"I think it puts an end to your child life right there. You can't do anything if you're pregnant because from now on, you have a life in your own hands. I mean, there's no, you can't go out and party. I mean, I think it's important that</i></p>

	<i>you should have the child.” (Kegler et al., 2001, p.248)</i>
<b>Lack of preparedness</b>	<p><i>“If you have a baby when you’re young, you can’t be able to support it.” (Kegler et al., 2001, p.248)</i></p> <p><i>“...teens do not know how to take care of kids ... If they were going to raise the baby, how can they have the time to study in order to get enough education to teach their children how to grow up later on in life?” (Kegler et al., 2001, p.248)</i></p>
<b>Pregnancy imposes a negative change on an adolescent’s life</b>	<p><i>‘Young parents noted, “Having a baby broke us up” and “I grew up but he didn’t.” (Herrman, 2008, p.45)</i></p> <p><i>‘[A] teen parent stated, “I don’t get sleep... I go to work, school and take care of my baby... it’s a mess.” (Herrman, 2008, p.46)</i></p>
<b>Practical disadvantages of pregnancy</b>	<p><i>“Usually, they’ll drop out and they don’t have any education, so they don’t get a good job, and so their kid will be growing up like poor and stuff.” (Kegler et al., 2001, p.248)</i></p> <p><i>“Ain’t nothing negative about having a baby, what’s negative is what you do when [you] get the baby. Then people be calling you ho’s and bitches and easy.” (Kegler et al., 2001, p.247)</i></p>

iii. *Benefits and positive aspects of pregnancy* diagram and exemplary quotations

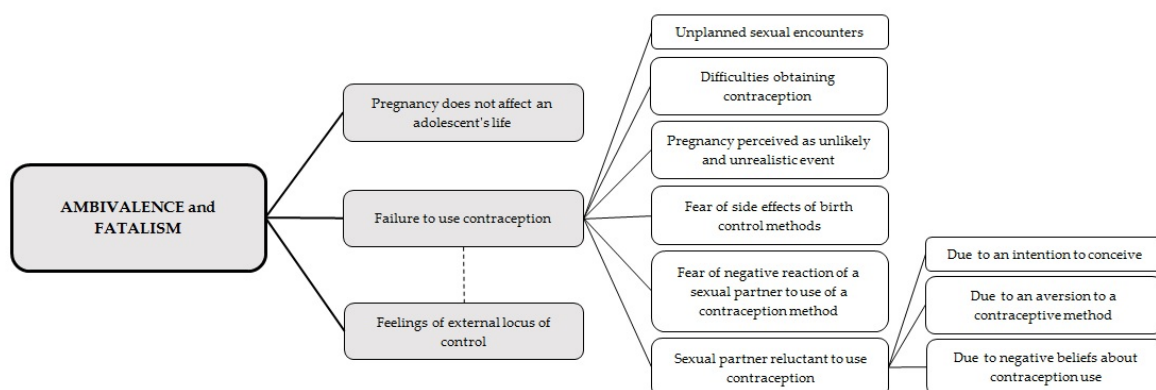


Theme: <i>Benefits and positive aspects of pregnancy</i>	
Sub-theme	Exemplary quotations
<b>There are no disadvantages of adolescent pregnancy</b>	<p><i>“I don’t really think there are any disadvantages in having a baby now, I am completely ready for this responsibility.” (Rosengard et al., 2006, p.507)</i></p> <p><i>“I dont [sic] regret that about having a baby. I dont [sic] think is nothing rong [sic] with it.” (Rosengard et al., 2006, p.507)</i></p>



<b>Adolescent pregnancy is manageable (even when not intended)</b>	<p>"You might have to get up a little earlier [if you have a baby while in high school], but they can bring the baby right to school." (Crump et al., 1999, p.36)</p> <p>"It won't be easy, but I know I can make it. I will graduate from high school. I will probably be in my own house. I'm not getting married. I know my mom will help me, and so will my older sister. My boyfriend will help out too." (Spear, 2004, p.340)</p>
<b>Receiving support</b>	<p>"The good things are I no [sic] I have way more support. If I were older I'd be expected [sic] to take way more responsibility." (Rosengard et al., 2006, p.506)</p> <p>"He calls me every day. We are close. It's just gonna get better. I know he'll be there for me and my baby. He will take care of it and he's already started paying some stuff. I know he'll help a lot." (Spear, 2001, p.577)</p>
<b>Pregnancy imposes a positive change on an adolescent's life</b>	<p>"Because I would not change her for anything [laughs]. I'm so glad that she's here - she's like, totally changed my - and she's given me more confidence as well. I was like - before I was very shy - I wouldn't even probably go into a shop and ask for something - with her - she's like a barrier there - she like, gives me the confidence." (Aged 17)' (Coleman &amp; Carter, 2006, p.605)</p> <p>"It's all right. It's kinda different. You hafta come in early and they give us rules, um, and that's not the time I'm used to coming in and it's hard and... I don't do it, so I get punished for it. It's different." (An adolescent who had to adapt to living in a maternity group home) (Montgomery, 2004, p.30)</p> <p>"Since my baby, my mom and I realize how much we love each other." (Hermann, 2008, p.45)</p> <p>'One father noted that the birth of his baby created a "common bond" and enhanced the relationship with his girlfriend.' (Hermann, 2008, p.45)</p>
<b>Adolescent mother is closer in age to her child (better parent-child relationship)</b>	<p>"[B]eing able to play along with your child not only being his/her parent but being a friend." (Rosengard et al., 2006, p.506)</p> <p>'[Y]outh identified that having children early may allow children to be closer to the parents' ages.' (Hermann, 2008, p.47)</p>

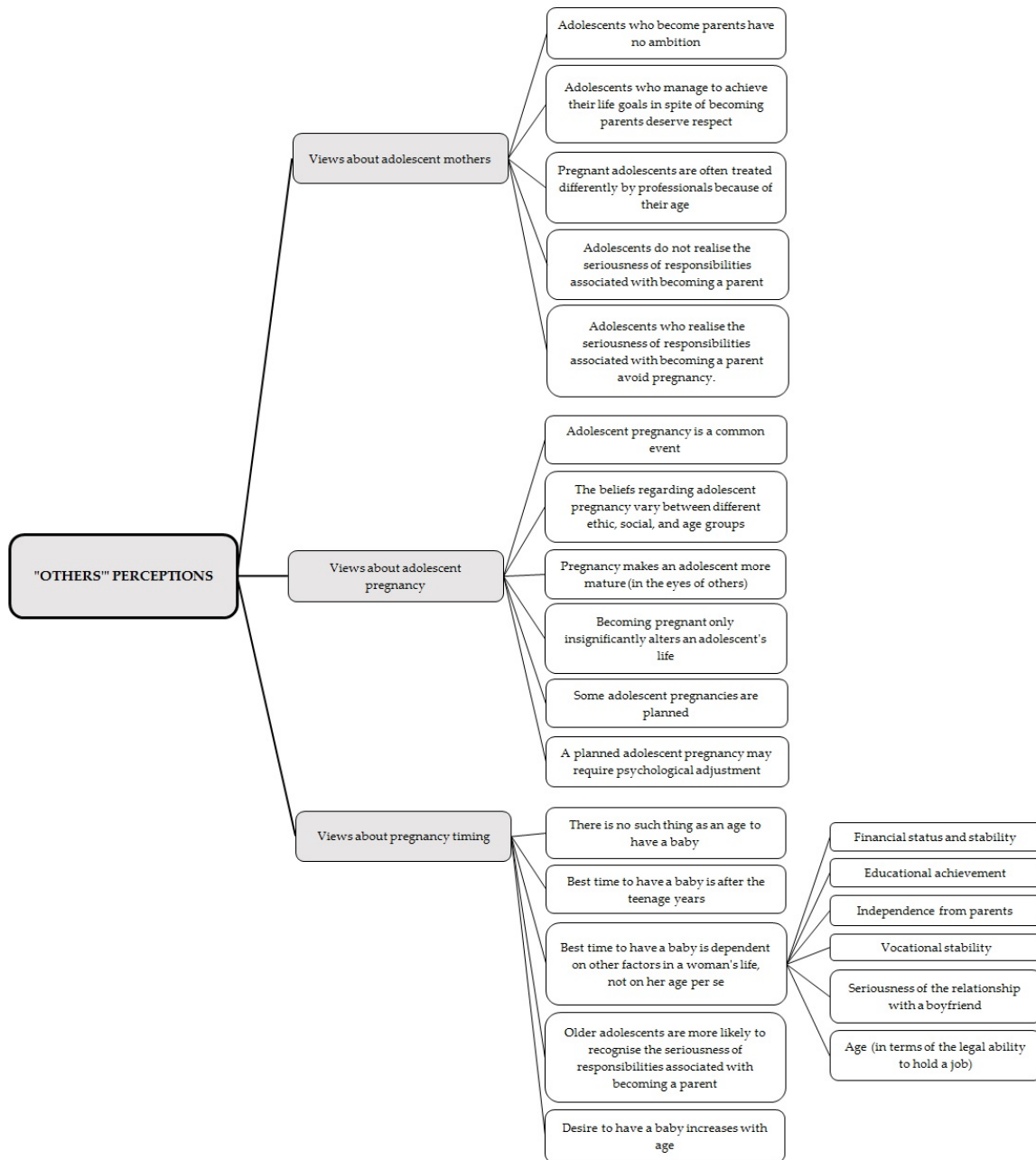
iv. *Ambivalence and Fatalism* diagram and exemplary quotations



Theme: <i>Ambivalence and Fatalism</i>	
Sub-theme	Exemplary quotations

<p><b>Pregnancy does not affect an adolescent's life</b></p>	<p><i>"I haven't changed that much since I'm pregnant. My choices were to give it up for adoption or my mom can get custody of it. 'Cause I'm goin' through all the pain, I might as well keep it for myself. Bein' pregnant don't really make that much difference to me."</i> (Spear, 2001, p.577)</p> <p><i>"It won't be much different, I'll still be able to do all the things I did before."</i> (Spear, 2001, p.577)</p>
<p><b>Failure to use contraception</b></p>	<p><i>"We weren't necessarily wanting to get pregnant but we weren't doing anything to prevent it either."</i> (Smith et al., 2013, p.334)</p> <p><i>"It [pregnancy] was kind of expected. My friends weren't really surprised 'cause me and my boyfriend were so close; a lot of my friends already have kids"</i> (Spear, 2001, p.576)</p> <p><i>"A lot of boys be offended [that their girlfriend is on the pill]. I be hearing a lot of people at my school talking about, "...Why is she on the pill? ...If she don't trust me, why am I with her?""</i> (Crump et al., 1999, p.39)</p>
<p><b>Feelings of external locus of control</b></p>	<p><i>"Don't ask me why my body got pregnant - that's up to my body. I wanted a baby, so I was happy, but it was the right time otherwise my body wouldn't have had one"</i> (Coleman &amp; Carter 2006, p.601)</p> <p><i>"My mom says if you were protected [used birth control] and it happened, it was meant to be"</i> (Spear, 2001, p.576)</p>

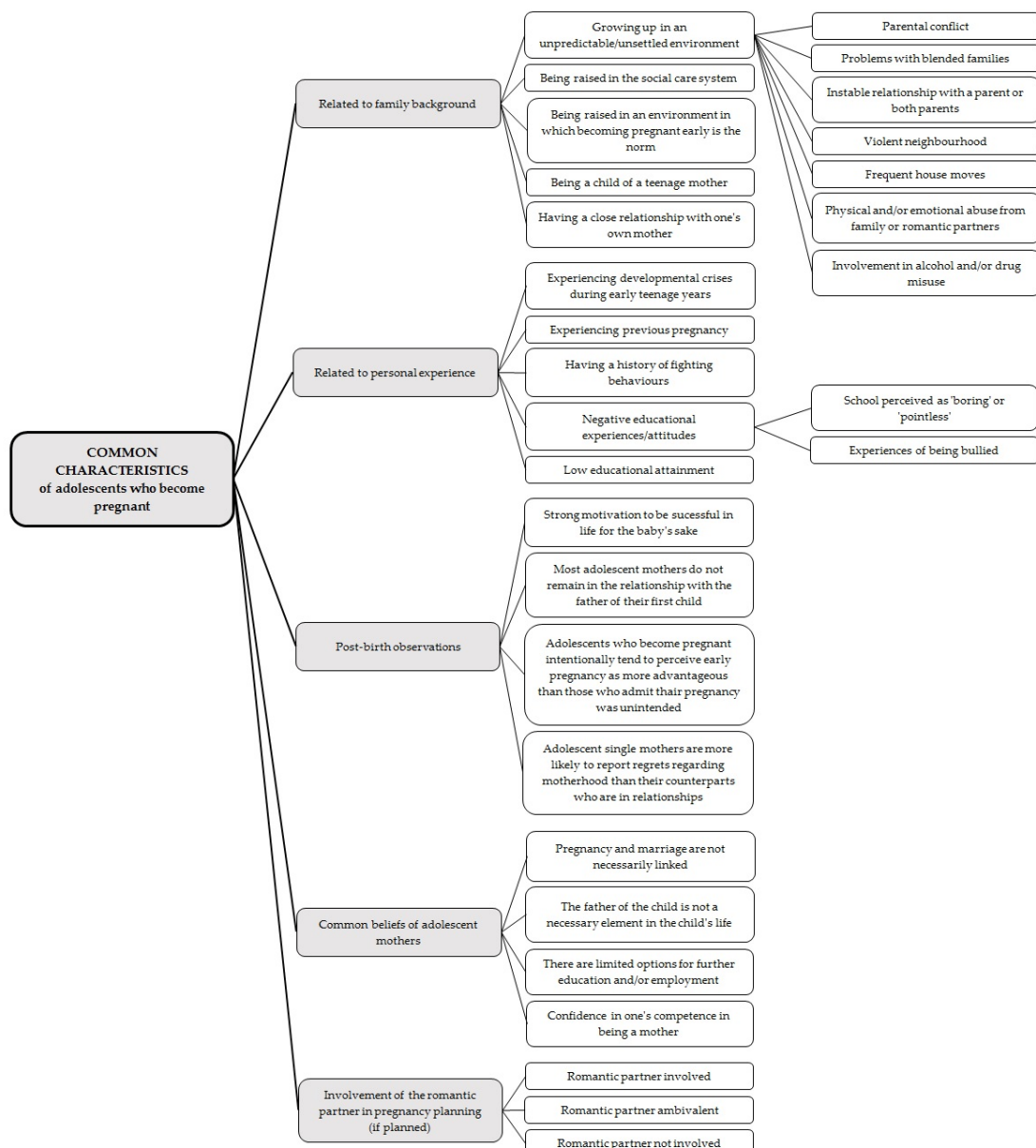
## v. Others' perceptions diagram and exemplary quotations



Theme: Others' perceptions	
Sub-theme	Exemplary quotations
Views about adolescent mothers	<p>"Some girls don't realize the responsibility of a baby. They think of a baby as a toy, like it's something to play with. Like you have a little girl and do her hair. [You] want one because you see it. They don't got it all up in their head." (Crump et al., 1999, p.36)</p> <p>"[T]he type of people that have babies as teens, they don't want to do nothing with their life." (Herrman, 2008, p.45)</p> <p>"It's harder for a young person possibly because, you know, they don't know what's going on and they haven't possibly got the professional help they need around them because the professionals look a bit funny at them, sort of "Well it's your own fault" kind of</p>

	<i>attitude ...</i> (Redwood <i>et al.</i> , 2012, p.22)
<b>Views about adolescent pregnancy</b>	<p><i>'Teen parents reflected that "Havin' a baby says I'm grown."</i> (Herrman, 2008, p.47)</p> <p><i>"I think a lot of teenage pregnancies are planned because there are a lot of girls out there who aren't sure what they want to do when they're older."</i> (Redwood <i>et al.</i>, 2012, p.22)</p>
<b>Views about pregnancy timing</b>	<p><i>"I think you should have your first baby when you're ready to take care of a baby, have a good job, your own place, not living with your mother, out of school, paying your own rent, bills, married."</i> (Crump <i>et al.</i>, 1999, p.36)</p> <p><i>'When asked about the "best" or "ideal" time to have a baby, many responded that it was preferable to wait until after school was finished and a steady job was found and the woman felt prepared to raise a child or was more or less "established".'</i> (Kendall <i>et al.</i>, 2005, p.303)</p> <p><i>"There is no such thing as an age to have a child; some people aren't ready to have kids no matter how old they are. Most of my girlfriends already have kids."</i> (Spear, 2001, p.576)</p>

vi. Common characteristics of adolescents who become pregnant diagram and exemplary quotations



Theme: <i>Common characteristics of adolescents who become pregnant</i>	
Sub-theme	Exemplary quotations
<b>Related to family background</b>	<p><i>"It was very confusing - (um) because my mum and dad split up when I was three and-a-half, so I sort of, had the heartbreak from there and that sort of, screwed me up a bit - and that's how I became with J [father of baby] - 'cos I was so screwed up, I didn't know where I was going, really." (Aged 16)' (Coleman &amp; Carter, 2006, p.601)</i></p> <p><i>"It wasn't a great family life! [laughs] Wasn't a great childhood. [laughs] It was great in some ways but (um) I ended up (um) being sexually abused, so it wasn't good in another way [laughs] . . . It was one of my brothers, so . . . it was just (um) getting too much - I was like, really depressed so I just had to drop out [of school] because I was like, killing myself, health-wise." (Aged 17)' (Coleman &amp; Carter, 2006, p.601-602)</i></p> <p><i>'[T]he five young women came from families where early pregnancy was a familial trait. All of them believed that their family lives were fraught with difficulties. In four cases, their parents had a marital breakdown and they went through problems with blended families. All of them had experienced developmental crises during their early teenage years, as well as violence and abuse from male family members and/or male partners.'</i> (Hanna, 2001, p.102)</p>
<b>Related to personal experience</b>	<p><i>'Raised by a divorced, alcoholic mother, seeking escape from a troubled home through drugs and running away, she aborted her first pregnancy at age 14.'</i> (Smith Battle, 1995)</p> <p><i>"I was bullied really badly and I just didn't go to school. I missed about two years. I ended up drinking and taking speed [drug] like, every day for about a year. I cut my wrists and took overdose - my aunty found me and took me to hospital . . . I didn't actually want to kill myself though. When I went back it was ok, but I never really knew what I was doing and so I only came out with two GCSEs [qualifications] in the end." (Aged 17)'</i> (Coleman &amp; Carter, 2006, p.602)</p>
<b>Post-birth observations</b>	<p><i>"Having a child made me more focused on school and doing well in school."</i> (Herrman, 2008, p.46)</p> <p><i>'Young parents discussed having a more focused goal orientation and a desire for children to experience a "better life"' (Herrman, 2008, p.46)</i></p> <p><i>'[M]ost women were no longer with the father of their first baby.'</i> (Kendall et al., 2005, p.305)</p>
<b>Common beliefs of adolescent mothers</b>	<p><i>'This perceived lack of alternative options and opportunities was particularly evident among those young women interviewed in more rural, isolated locations. For these young women, becoming pregnant to gain a purpose in their life was especially striking. Young women in these locations reported that prior to becoming pregnant, they experienced practical and financial barriers to going to college, or going further afield for a job that was better paid with better prospects' (Coleman &amp; Carter, 2006, p.604)</i></p> <p><i>"I'm not worried about being married. My momma isn't married, she's staying with my brother's daddy. Getting married isn't important really, as long as you are together. If you have a baby then that's one thing. You don't need the papers."</i> (Kendall et al., 2005, p.305)</p> <p><i>"I love my boyfriend and my family likes him, but I'm not gonna marry him. He wants to get married, and he gets mad when I say I don't want to. I don't want to go through a divorce. So what's the sense of gettin' married? I told my mom, straight up, that I'm not getting' married, maybe when I'm 40 or 50 years old. She says I don't have to get married, just make sure your child knows who his father is." (Spear, 2001, p.577)</i></p>
<b>Involvement of the romantic partner in pregnancy planning (if planned)</b>	<p><i>"Well, (um) we - we decided and then, like I say, we got [laughs] - we got pregnant like, that first time but (um) like, from the night we decided, I had folic acid and we didn't - I didn't smoke anyway and then we didn't drink, but I didn't really do it for long enough, 'cos I found out like, two weeks later, I was pregnant, so [laughs]." (Aged 18)'</i> (Coleman &amp; Carter, 2006, p.599)</p> <p><i>"We sort of, talked about it - we just didn't - we just - we were just having a conversation of</i></p>

	<p><i>what would happen in the future and we talked about what was gonna happen - it wasn't a set conversation - we just started talking about it." (Aged 17)</i> (Coleman &amp; Carter, 2006, p.599)</p> <p><i>"1 participant stated that she and her boyfriend sat down and planned it, and because he really did not care, she went ahead with trying to become pregnant."</i> (Montgomery, 2001, p.23)</p>
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